NFPA 101 Life Safety

State of Maine Human Rights Act ADAAG Americans with Disabilities Act ICC ANSI 117.1 Accessible and Usable Buildings and Facilities

2009 IEBC: International Existing Building Code

PROJECT SUMMARY:

Conversion of an existing historic building (mortuary) to a mixed-use Inn and Restaurant in accordance with the National Park Service Guidelines for Rehabilitating Historic Buildings. The work will affect all aspects of the building including, but not limited to, the foundations, the masonry, the internal structure and walls, existing historical elements for repair and replacement, doors (interior and exterior), windows, roofing and flashing. The building will be sprinkled with an NFPA 13 system.

<u> Square Footages:</u>

Second Floor -		(B Restaurant - 790sf./R1 Hotel 3586sf.) (B Restaurant - 2435sf./R1 Hotel 1645sf. (R1 Hotel)
Third Floor -	1927 sf.	(R1 Hotel)

Unit Count:

Ground Floor	4
First Floor	3
Second Floor	4
Third Floor	4
TOTAL	15

712.3.2 Rated access doors permitted in fire rated ceiling assemblies

713.1.1 Penetrations of fire resistance rated walls by ducts (not protected by dampers): Sleeves through walls, in cavity construction, shall be securely fastened (a fire stop assembly is required between sleeve and pipe/duct).

713.3.2 Membrane penetrations shall be limited to 16 square inches each and an aggregate of 100 square inches/100 sf of wall Offset boxes by 24" on opposite sides of wall

Not required at sprinklers with escutcheon plate **714.4** Where fire resistance rated floor/ceiling assemblies are required, voids

along curtain wall and floors shall be sealed with an approved system, matching the fire resistance rating of the floor system.

715.4 Fire Door and Shutter Assemblies Table 715.4 Type of Assembly Required Assembly Rating Min Door Assembly

		Rating (hrs)
Fire Walls	3 hours	3 hours
Fire Barriers (2 Hr)	2 hours	1-1/2 hours
Other Fire Barriers	1 hour	3/4 hour
Fire Partitions		
Corridor walls	1 hour/.5 hour	1/3 hour
Other fire partitions	1 hour	3/4 hour
Exterior Walls	2 hours	1 1/2 hours
Smoke Barriers	1 hour	1/3 hour

715.4.3.1 Fire door assemblies shall meet requirements for smoke and draft control door assemblies

717 Concealed Spaces

717.2 In combustible construction fire barriers shall be installed to cut off concealed draft openings and form a barrier between floors. Fireblocking required at:

Mineral wool allowed in double stud walls - Vertically at floors and ceilings - Horizontal spacing not exceeding 10 feet Connections between horizontal and vertical spaces (soffits, dropped

Stairways at top and bottom of run between stringers Piping, vents, etc.

CODE SUMMARY IBC 2009:

Chapter 3- Use and Occupancy Classification Mixed Use (NonSeparated)

304.1 Business Group B Restaurant, occupancy less than 50 310.1 Residential Group R-1 **Chapter 4- Special Detailed Requirements Based on Use and Occupancy**

303.1 Assembly Group A Exceptions: (1) A building or tenant space used for assembly purposes with an

occupant load of less than 50 persons shall be classified as a Group B **Accessibility Codes** occupancy.

420 Group R-1 420.2 Separation Walls-Walls separating Dwelling Units from Dwelling Units and from other occupancies are Fire Partitions in accordance with Section 709

420.3 Horizontal Separation- Floor Assemblies separating Dwelling Units from Dwelling Units and from other occupancies are Horizontal Assemblies in accordance with Section 712 (1 hour)

Chapter 5- General Building Heights and Areas

Table 503 Allowable Heights and Areas Business Group B Type 3B Construction - 3 stories, 19,000 sf per story Residential Group R-1 Type 3B Construction - 4 stories, 16,000 sf per story

Total Building Sq Footage: 12,639 sf. 504.2 Automatic Sprinkler System Increase. Where a building is equipped throughout with an approved automatic sprinkler systm in accordance with Section 903.3.1.1 The value specified in Table 503 for maximum building height

increased by 20 feet and the maximum number of stories is increased by one.

Construction Type 3B- Group B (Business most restrictive): 3 stories allowed (3 proposed) Refer to building elevations for determination of basement by definition.

508 Mixed Use and Occupancy

508.3 Nonseparated occupancies Buildings or portions of buildings that comply with the provisions of this section shall be considered as nonseparated occupancies.

717.2.5 Double Stud Walls Batts or blankets of mineral or glass fiber insulation shall be allowed as fire blocking in walls constructed using parallel rows of studs or staggered studs.

717.2.2 Concealed Wall Spaces Fire blocking shall be provided in concealed spaces of stud walls and partitions, including furred spaces, and parallel rows of studs or staggered studs as follows: 1. Vertically at ceiling and floor levels

71 7.3.2 Use Group R-1 Draft stopping in floor/ceiling spaces not required per Exception No. 1, Sprinkler system provided in accordance with Section 903.3.1.1.

717.4 Draft Stopping In Attics 717.4.2 Group R-1 Not required in attics and concealed roof spaces per Exception No. 2, Sprinkler system provided in accordance with Section

Chapter 8- Interior Finishes

Table 803.9 Interior Wall and Ceiling Finish Requirements By Occupancy- Sprinklered Group Exit Enclosures Corridors Rooms and Enclosed Spaces

Chapter 9- Fire Protection Systems

2. Horizontally at intervals not exceeding 10'.

Table 903.2 Occupancy Related Automatic Sprinkler Requirements Occupant Load

Sprinklers required Any level

903.3.1.1 NFPA 13 Sprinkler Systems The building will be equipped throughout with an automatic sprinkler system in accordance with NFPA 13.

903.3.2 Quick response or residential automatic sprinklers shall be installed in dwelling units.

907 Fire Alarm and Detection Systems Class B 907.2 Where Required-New Buildings and Structures

Exception 2: Automatic heat detection is not required in buildings with automatic sprinkler system 907.2.2 Group B: Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed accordance with section 903.3.1.1

907.2.9 Group R-1: Manual fire alarm station is required in buildings with more than 12 dwelling units in accordance with Section 907.5

907.2.9.2 Smoke alarms shall be installed per Section 907.2.11 (within sleeping

907.2.11.1 Group R-1: Smoke alarms shall be installed in each sleeping area and in each room on the path from the sleeping area to the means of egress. **912.2.1** Fire Department Connections: Locations as approved by fire chief so vehicles and hose lines will not interfere with building access (visible location on

602.3 Type III Construction Exterior walls are to be noncombustible materials and interior building

are any materials permitted by Code. Fire retardant treated wood is permitted as substitute for noncombustible materials for framing within exterior wall assemblies of a 2 hour rating or less. The exterior surfaces of the wall must be

Chapter 7- Fire and Smoke Protection Features 704 Fire Rating of Structural Members

704.3 Primary Structural Frame Supporting more than 2 floors, and required to have a fire resistance rating, or supporting a load bearing wall, shall be provided with individual encasement protection on all sides. Exception: Individual encasement on all exposed sides provided protection is

accordance with fire resistance rating

Chapter 10- Means of Egress

Business Occupant Load - Basement-

Business Occupant Load- First Floor-

Residential Occupant Load- Basement-

Residential Occupant Load - First Floor -

Residential Occupant Load - Third Floor -

Residential Occupant Load - Second Floor -

34 1/2" Width/ (0.3)

Lower Level Egress Door 001 - 36 1/2" Width / (0.2)

Restaurant Egress Door 116 - 36" Width / (0.2)

1st Floor Egress Door 101 - 42" Width / (0.2)

37" Width / (0.3)

1004 Occupant Load

1005.1 Egress Width

Business

Stair B -

Exception no. 2

1008 Doors, Gates and Turnstiles

Residential

704.4 Secondary Structural Members

If required to be fire resistant rated, secondary members shall be protected by individual encasement when supporting more than 2 floors. Membrane protection is permissible if supporting 2 floors or less.

705 Exterior Walls **705.2.2** Projections from walls of Type III construction shall be of any approved

705.5 Fire Resistance Ratings Fire Seperation Distance of greater than 10 feet, at exterior walls, shall be

for exposure from the inside. Fire separation less than 10' shall be rated for fire exposure from both sides.

705.6 Exterior walls shall have sufficient structural stability to remain in place for duration of the time required by the fire resistance rating. Supporting elements must be fire resistance rated

Band joist, or supporting beam, must be fire rated Only the structural element within the floor system that supports the vertical load of the wall must be fire resistance rated construction

Table 1004.1 Maximum Floor Area Allowances per Occupant

200 gross sf

 $34 \frac{1}{4}$ " Width $\frac{1}{(0.3)}$ = 114 Occupants

1007.2.1 Elevators (NOT) Required. In buildings where a required accessible floor

is four or more stories above a level of exit discharge, at least one accessible

Clear width 48". Not Required in buildings with automatic sprinkler system.

Area of Refuge- Not Required in Group R1, with Automatic Sprinkler System

1007.8 Two-way communication system shall be provided at 2nd and 3rd floor.

means of egress shall be an elevator. (Backup Generator NOT Req'd).

1007.10 Directional signage shall be provided at elevator landings.

790sf/100

3,586sf/200

2435sf/100

1645sf/200

2256sf/200

1927sf/200

= 115 Occupants

= 123 Occupants

= 8

= 18

= 24

= 182 Occupants

= 170 Occupants

= 210 Occupants

Table 705.8 Maximum Area of Wall Openings Based on Fire Separation **Distance and Degree of Opening Protection**

Fire Separation Dist. Degree of Opening Protection Allowable Area 0' to less than 3' Unprotected, Sprinklered Not Permitted 3' to less than 5' Unprotected, Sprinklered 5' to less than 10' Unprotected, Sprinklered 10' to less than 15' Unprotected, Sprinklered 45% 15' to less than 20' Unprotected, Sprinklered Unprotected, Sprinklered 25' to less than 30' Unprotected, Sprinklered No Limit 30' or greater Unprotected, Sprinklered Not Required

705.8.5 Vertical Separation of openings Not Required, Exception no. 2, Automatic Sprinkler System in Accordance with

705.11 Parapets

Not required on exterior walls per Exception No. 5 where the wall is permitted to have at least 25% of the exterior wall areas containing unprotected openings per Table 705.8, and Exception No.5 where the entire building is covered with a class C roof covering, the exterior wall shall be allowed to terminate at the underside of the roof sheathing or deck in Type 3 construction provided the roof sheathing or deck is constructed of approved fire retardant treated wood for a distance of 4 '.

707 Fire Barriers (shafts, exit and floor opening enclosures) **707.3.1** Shaft enclosures shall comply with Section 708.4 (2 hours)

707 .3.2 The fire resistance rating of exit enclosures shall comply with Section 1022.1 (2hours). (Refer to IEBC 2009 at end of this page)

707.5 Fire barriers shall extend from the top of the floor/ceiling assembly below to the underside of the floor or roof sheathing, slab or deck above.

1008.1.1 Size of Doors- Minimum Clear width = 32", maximum leaf width 48" Exception no. 1- Minimum and maximum widths do not apply to door openings not part of the required means of egress in Group R-2 occupancies.

1008.1.4.4 Group R-2 occupancies building entry doors are permitted to be equipped with access control system.

1008.1.5 Provide a level landing on each side of door, except at exterior locations with 2% slope pitch for drainage.

1008.1.8 48" plus door width required minimum space between doors in series.

1008.1.9.10 Interior stairway means of egress doors shall be openable from Exception 1: Stairway discharge doors shall only be locked from the opposite

1008.1.10 Doors to electrical rooms with equipment rated at 1200 amps or more will require panic hardware.

1009 Stairways

codes in IEBC 2009).

B - Business

R - Residential

1009.1 Stairway width- Minimum required width of 44" is provided. (Refer to Existing Stair codes in IEBC 2009).

1009.12 Handrails required on each side of stair. (Refer to Existing Stair codes in IEBC 2009).

250'

1013.1 Guard (rails) are required at stairs more than 30" above the floor and within 36" horizontally to the edge of the open side. (Refer to Existing Stair

1016 Exit Access Travel Distance

Table 1016.1 Exit Access Travel Distance Max. Distance Sprinklered Occupancy

Actual Distance

1018.6 Corridor Continuity: Fire resistance rated corridors shall be continuous from point of entry to an exit. Elevator shall be fire resistance rated and smoke Note: Non-egress doors are sized to meet Accessibility requirements per 521 Exception: Foyers, lobbies or reception rooms constructed as required

> All spaces within each story shall have access to the minimum number of approved independent exits as specified in Table 1021.1 based on the occupant

for corridors shall be not be construed as intervening spaces.

707.5.1 Supporting construction shall be protected to required fire resistance

rating of the fire barrier supported (fireblocking is required in cavities if shaft

708.2 Fire barrier construction not required at piping, conduits, etc. penetrations

connecting 4 stories or more, and shall have a fire resistance rating not less than

Not required per exception no. 4 ... "building is protected by an automatic sprinkler

One hour.

1/2 hour(when fully

sprinklered per

708.8.1 Penetrations other than those necessary for the purpose of the shaft

709 Fire Partitions (exit access corridors, dwelling unit separations, etc.)

709.4 Continuity: Fire partitions shall extend from floor below to underside of

wall. Fire blocking is not required if equipped with automatic sprinkler system

709.5 Where exterior walls serve as part of the required fire resistance rating

712.3 Horizontal assemblies separating dwelling units shall be a minimum of 1

separation, walls shall comply with Section 705 Exterior Walls and fire resistance

and sprinklers are installed within combustible floor/ceiling and roof/ceiling

floor/roof sheathing above. Supporting structure shall be protected similarly to

Fire partitions shall have a fire resistance rating of not less than 1 hour.

Walls Separating Dwelling Units (420.2)

Corridor Walls per Table 1018.1

708 Shaft Enclosures (stairs, chutes, elevators, duct shafts, etc.)

708.4 Shaft enclosures shall have a 2 hour fire resistance rating where

extends through the floor level at every floor level).

if protected per Section 712.4

708.14.1 Elevator Lobby Enclosure

709.3 Fire Resistance Ratings

rated requirements shall not apply.

hour fire resistance rated construction.

system in accordance with section 903.3.1.1 "

shall not be permitted.

708.1 Shaft enclosures to be constructed as fire barriers

the floor assembly penetrated but not exceeding 2 hours.

Exceptions: 2. As modified by Section 1021.2.

Occupancies shall be permitted to have a single exit in buildings otherwise required to have more than one exit if the areas served by the single exit do not exceed the limitations of Table 1021.2. Mixed occupancies shall be permitted to be served by single exits provided each individual occupancy complies with the applicable requirements of Table 1021.2 for that occupancy. Basements with a single exit shall not be located more than one story below grade plane.

Table 1021.2 Stories with One Exit

Occ. Max. Occupants/Travel Dist. B 49 occupants and 75 ft. travel (**Two provided**) First Story and Bsmt 10 occupants and 75 ft. travel (Meets Code) 4 dwelling units and 50 ft. travel (WAIVER)

Second Story R-2 4 dwelling units and 50 ft. travel (WAIVER) Third Story 1018 Corridors **Table 1018.1 Corridor Fire Resistance Rating**

Fire Rating with Sprinkler Occupancy Occupant Load <u>System</u> 0 hour Greater than 30 Greater than 10 .5 hour 1018.2 Corridor Width: Minimum 44" provided.

Exception No. 3: 36" minimum width allowed within dwelling units 1018.4 Dead Ends: 50' maximum dead end corridor allowed per Exception No. 2 for Group B, M, R-2 and S Occupancies. (A3 occupancy allows 20' max dead

end corridor) in buildings with automatic sprinkler system.

CODE SUMMARY - IEBC 2009:

REQUEST FOR AN ADDITIONAL FLOOR.

705.3.1.1 Single-exit buildings

through 912.7.4.

Only one exit is required from buildings and spaces of the following 1. In Group A, B, E, F, M, U and S occupancies, a single exit is permitted in the

story at the level of exit discharge when the occupant load of the story does not exceed 50 and the exit access travel distance does not exceed 75 feet (22 860 5. Groups R-1 and R-2 not more than two stories in height, when there are not more than four dwelling units per floor and the exit access travel distance does not exceed 50 feet. The minimum fire-resistance rating of

912.7 Enclosure of vertical shafts Enclosure of vertical shafts shall be in accordance with Sections 912.7.1

the exit enclosure and of the opening protection shall be 1 hour. WAIVER

912.7.1 Minimum requirements Vertical shafts shall be designed to meet the International Building Code requirements for atriums or the requirements of this section.

912.7.2 Stairways When a change of occupancy classificiation is made to a higher hazard category as shown in Table 912.4, interior stairways shall be enclosed as required by the International Building Code.

> Exceptions: 1. In other than Group I occupancies, an enclosure shall not be required for openings serving only one adjacent floor and that are not connected with corridors or stairways serving other floors. 2. Unenclosed existing stairways need not be enclosed in a continuous vertical shaft if each story is separated from other stories by 1-hour fireresistance-rated construction or approved wired glass set in steel frames and all exit corridors are sprinklered. The openings between the corridor and the occupant space shall have at least one sprinkler head above the openings on the tenant side.

1103.9 STAIRWAY RAILINGS - Grand stairways shall be accepted without complying with the handrail and guard requirements. Existing handrails and guards at all stairs shall be permitted to remain, provided they are not structurally dangerous.

CHAPTER 11 - HISTORIC BUILDINGS 1103.9 STAIRWAY RAILINGS - Grand stairways shall be accepted without complying with the handrail and guard requirements. Existing handrails and guards at all stairs shall be permitted to remain, provided they are not structurally

1103.10 GUARDS - Guards shall comply with Sections 1103.10.I and 1103.102. **1103.101 HEIGHT** - Existing guards shall comply with the requirements of **1103.10.2 GUARD OPENINGS** - The spacing between existing intermediate railings or openings in existing ornamental patterns shall be accepted. Missing elements or members of a guard may be replaced in a manner that will preserve

the historic appearance of the building or structure 1105.1 GENERAL - Historic buildings undergoing a change of occupancy shall comply with the applicable provisions of Chapter 9, except as specifically permitted in this chapter. When Chapter 9 requires compliance with specific requirements of Chapter 5, Chapter 6, or Chapter 7 and when those requirements are subject to the exceptions in Section 1102, the same exceptions shall apply to this section.

1105.4 OCCUPANCY SEPARATION - Required occupancy separations of 1hour may be omitted when the building is provided with an approved automatic sprinkler system throughout.

CODE SUMMARY NFPA 101 LIFE SAFETY 2009:

SPRINKLED WITH NFPA 13 NFPA 6.1.8.1.3

OCCUPANCY - HOTEL NFPA 6.1.10 OCCUPANCY - MERCANTILE

6.1.14.1.3 Where incidental to another occupancy, areas used as follows shall be permitted to be considered part of the predominant occupancy and shall be subject to the provisions of the *Code* that apply to the predominant occupancy

A.6.1.10.1 Mercantile Occupancy: Mercantile Occupancies include the (4) Restaurants with fewer than 50 persons

6.1.14.3 Mixed Occupancies

street side of building).

508.3.1 Occupancy classification

Chapter 6- Types of Construction

508.3.3 Separation.

Building Element

Primary Structural Frame

Non-Bearing Walls and

Non-Bearing Walls and

Floor Construction and

Secondary Members

Roof Construction and

Secondary Members

5' <u><</u> x <10'

10' <u><</u> x < 30'

x > 30'

Partitions. Exterior

Partitions, Interior

Exterior Walls

Interior Walls

Nonseparated occupancies shall be individually classified in accordance with

Section 302.1. The requirements of this code shall apply to each portion of the

building based on the occupancy classification of that space except that the most

Exceptions: 2. Group I-1, R-1, R-2 and R-3 dwelling units and sleeping units shall

be separated from other dwelling or sleeping units and from other occupancies

Type 3B

0 hour

2 hours

(See Table 602)

Group B, R

1 hour

1 hour

1 hour

1 hour

1 hour

0 hour

0 hour

0 hour

0 hour

0 hour

Table 602- Fire Resistance Rating Requirements For Exterior Walls Based

**Higher of 2 determining factors (Tables 601 end 602) indicate exterior bearing

903.4 Valve controlling water supply for automatic sprinkler system shall be

905.2 Standpipe Systems will be provided in accordance with NFPA 14

905.3.1 Height- Class 1 Standpipes are allowed in buildings equipped

otherwise approved by the fire code official

required where hose stream is reachable).

906 Portable Fire Extinguishers- Required in Group B, R-1

905.4 Class I standpipe hose connections shall be provided in the following

In every stairway at an intermediate floor level between floors, unless

Where roof slope is less than 4:12 each standpipe shall be provided

with a hose a connection either on the roof or the highest landing of a

On each side of the wall adjacent to exit opening of horizontal exit (Not

Exception: In Group R and B occupancies extinguishers only required on

on Fire Separation Distance (non-loadbearing walls)

Type IA

Type 3A

Type 1A

Type 3A

walls to be 2 hour fire resistance rated from the inside.

electronically supervised by a fire alarm control unit.

throughout with an automalic sprinkler system.

stairway with stair access to roof.

occupancies: provided in accordance with NFPA 10

<u>Fire Separation Dist.</u> <u>Construction Type</u>

contiguous to them in accordance with the requirements of Section 420.

restrictive applicable provisions of Section 403 and Chapter 9 shall apply to the

building or portion thereof in which the nonseparated occupancies are located.

No separation is required between nonseparated occupancies

Table 601 - Fire Resistance Ratings for Building Elements

6.1.14.3.1 Each portion of the building shall be classified as to its use in accordance with section 6.1

6.1.14.3.2 The means of egress facilities, construction type, protection, and other safeguards in the building shall comply with the most restrictive fire and life safety requirements of the occupancies involved

NFPA TABLE A.8.2.1.2 CONSTRUCTION TYPE III(200)

28 - NEW HOTEL 28.2.5.4 Common Path of Travel <50 FT. 28.2.6.2 Travel Distance within unit < 125 FT. Travel distance from unit to exit < 200 FT. Sprinkled exit enclosure 1 hour 28.2.2.1.2 28.2.2.12.2 In buildings protected by approved, supervised automatic sprinkler system, area of refuge shall not be required. Building to be fully sprinkled by automatic NFPA 13 system.

Fire alarm system in accordance with section 9.6 provided Fire alarm initiation 28.3.4.2 (1) Manual Means (2) Manual fire alarm box located at hotel desk (3) Automatic sprinkler system (4) Automatic detection system other than sleeping room smoke detectors Corridor walls: 1/2 Hour (SPRINKLED) 28.3.6.1.3 Corridor doors: 20 min rated (.33 HOURS) (Existing historic unit entry doors U04 to remain waiver required) 28.3.6.2.3 Corridor Doors: Self closing and self-latching Dwelling unit demising walls: 1/2 Hour (1 HOUR REQ.FOR 28.3.7.2

36 - NEW MERCANTILE

In buildings protected by approved, supervised automatic sprinkler system, area of refuge shall not be required. Dead-end corridors shall not exceed 50 ft. 36.2.5.3 Common Path of Travel <100 ft. 36.2.6.2 Travel distance <250 ft.

Fire alarm system in accordance with section 9.6 provided 36.3.4.2 Fire alarm initiation (1) Manual Means (2) Automatic fire detection system (3) Automatic sprinkler system plus a minimum one fire alarm

T7.2.2.2.1.1(b) **EXISTING STAIRS:** Minimum width clear: 36 in. (Existing historic stairs A and C do not meet required width, see calculation with **A.7.3.3.1** for Capacity Factors)

Maximum height of riser

Number of Exits

the level of exit discharge.

fire protection rating.

Minimum tread depth: Minimum headroom: 6 ft. 8 in. Maximum height between landings: 12 ft. Stair material same as building construction New handrails: Not < 34 in. and not > 38 in. 7.2.2.4.4.2 Existing handrails not < 30 in. and not > 38 in. (Existing handrail at Stair B is being retrofitted to meet

7.2.2.4.4.5 New handrails provide min. 2-1/4 in. clearance between stair and wall 7.2.2.5.4 Stairway signage shall comply with 7.2.2.5.4.1 parts (A) thru (M)

A single exit shall be permitted in buildings where the total 28.2.4.2 number of stories does not exceed four, provided that all the following conditions are met: (1) There are four or fewer guest rooms or guest suites per story. (2) The building is protected throughout by an approved, supervised automatic sprinkler system in accordance with 28.3.5 (3) The exit stairway does not serve more than one-half of a story below

protected with self-closing door assemblies having a minimum 1-hour

(4) The travel distance from the entrance door of any guest room or Serving 1st Floor Business Occupancy guest suite to an exit does not exceed 35 ft. See drawings for distance from guest rooms to exit (5) The exit stairway is completely enclosed or separated from the rest of the building by barriers having a minimum 1-hour fire resistance (6) All openings between the exit stairway enclosure and the building are

(7) All corridors serving as access to exits have a minimum 1-hour fire (8) Horizontal and vertical separation having a minimum ½-hour fire resistance rating is provided between guest rooms or suites.

Historic Buildings

43.10.4.3 Means of Egress. Existing door openings, window openings intended for emergency egress, and corridor and stairway widths narrower than those required for nonhistoric buildings under this Code shall be permitted, provided that one of the following criteria is met:

(1) In the opinion of the authority having jurisdiction, sufficient width and height exists for a person to pass through the opening or traverse the exit, and the capacity of the egress system is adequate for the occupant load. Occupant Load per floor of Hotel and Mercantile is as follows based upon Table 7.3.1.2 Residential Occupant Load - Basement 3586sf/200 Mercantile Occupant Load – First Floor = 49

1645sf/200

2256sf/200

1927sf/200

= 9

= 12

Residential Occupant Load- Third Floor A.7.3.3.1 Capacity Factors

Stair D -

Residential Occupant Load - First Floor

Residential Occupant Load – Second Floor

Egress Stairways (width per person) $34 \frac{1}{2}$ " Width / (0.3) = 115 Occupants Serving Ground Floor 37" Width / (0.3) = 123 Occupants Stair B -Serving 2nd & 3rd Floors

Serving 3rd Floor Egress Doors (width per person) Lower Level Egress Door 001 - $36 \frac{1}{2}$ " Width /(0.2) = 182 Occupants Serving Ground Floor 1st Floor Egress Door 101 - 42" Width / (0.2) = 210 Occupants Serving 1st, 2nd & 3rd Floors Restaurant Egress Door 116 - 36" Width / (0.2) = 170 Occupants

34 1/4" Width / (0.3) = 114 Occupants

All egress doors will be equipped with panic hardware

43.10.4.6.2 Interior wall and ceiling finishes in exits, other than in one- and two- family dwellings, shall meet on of the following criteria (1) The material shall have a flame spread classification of Class C or

(3) Existing materials not meeting the minimum Class C flame spread criteria shall be permitted to be continued in use, provided that the building is protected through-out by an approved automatic sprinkler

43.10.4.7 Stairway Enclosure **43.10.4.7.1** Stairways shall be permitted to be unenclosed in a historic building where such stairways serve only one adjacent floor. Communicating stair C will remain in place. 43.10.4.8 One-Hour Fire-Rated Assemblies.

resistance-rated construction requirements of other sections of this Code where the existing wall and ceiling are of wood lath and plaster construction in good condition 43.10.4.9 Stairway Handrails and Guards New, code compliant handrails are being provided in egress stairs A, B

Existing walls and ceilings shall be exempt from the minimum 1- hr fire

43.10.4.9.1 Existing grand stairways shall be exempt from the handrail and guard requirements of other sections of this code.

43.10.4.9.2 Existing handrails and guards on grand stair cases shall be permitted to remain in use, provided that they are not structurally dangerous.

43.10.4.11 Sprinkler Systems Building will be fully outfitted with an automatic NFPA 13 Sprinkler system. 43.10.5 Change of Occupancy. **43.7.1.1** A change of use that does not involve a change of occupancy classification shall comply with the requirements applicable to

the new use in accordance with the applicable existing occupancy **43.10.5.2 Means of Egress** Existing door openings, window openings intended for emergency egress, and corridor and stairway widths narrower than those required for non-historic buildings under this Code shall be permitted, provided that one of the following criteria is met:

See calculation using **Table 7.3.3.1**. **43.10.5.3 Door Swing** Where approved by the authority having jurisdiction, existing front doors shall not be required to swing in the direction of egress travel, provided that other approved exits have sufficient capacity to serve the total occupant load. Existing historic entry Doors 112 and 113 to remain in place. Capacity factors for egress doors 001, 101 and 116 calculated using **Table 7.3.3.1.** and meet required occupant load per floor

ARY

SUMM

CODE S

FRANC

THE



